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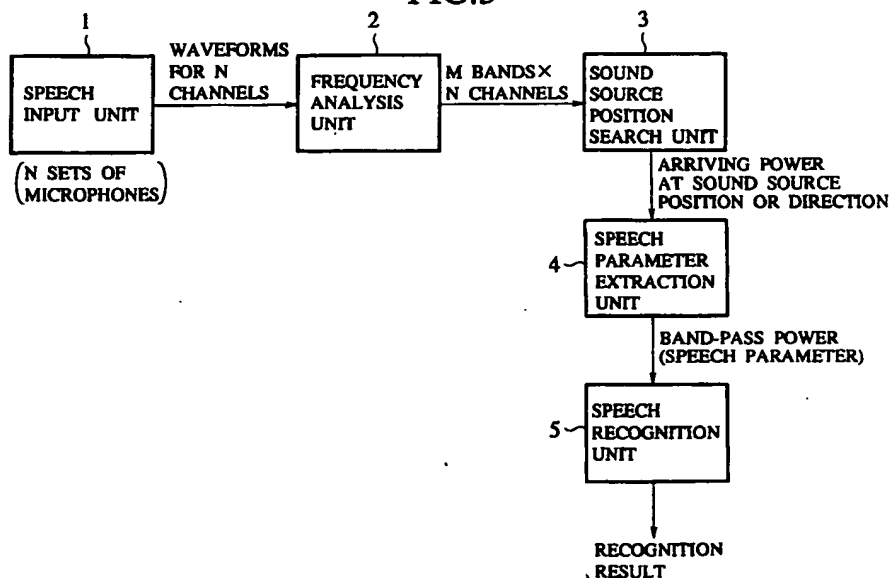
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(54) **Method and system for microphone array input type speech recognition**

(57) A microphone array input type speech recognition scheme capable of realizing a high precision sound source position or direction estimation by a small amount of calculations, and thereby realizing a high precision speech recognition. A band-pass waveform, which is a waveform for each frequency bandwidth, is obtained from input signals of the microphone array, and a band-pass power of the sound source is directly obtained from the band-pass waveform. Then, the

obtained band-pass power is used as the speech parameter. It is also possible to realize the sound source estimation and the band-pass power estimation at high precision while further reducing an amount of calculations, by utilizing a sound source position search processing in which a low resolution position estimation and a high resolution position estimation are combined.

FIG.3





European Patent
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EUROPEAN SEARCH REPORT

Application Number
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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
A	SULLIVAN T M ET AL: "MULTI-MICROPHONE CORRELATION-BASED PROCESSING FOR ROBUST SPEECH RECOGNITION" SPEECH PROCESSING, MINNEAPOLIS, APR. 27 - 30, 1993, vol. VOL. 2, no. -, 27 April 1993, pages II-91-94, XP000427733 INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS * paragraph 2; figure 1 *	1,10,12, 14,23,25	G10L3/00
A	HUANG J ET AL: "A BIOMIMETIC SYSTEM FOR LOCALIZATION AND SEPARATION OF MULTIPLE SOUND SOURCES" IEEE TRANSACTIONS ON INSTRUMENTATION AND MEASUREMENT, vol. 44, no. 3, 1 June 1995, pages 733-738, XP000527552 * paragraph II; figure 1 *	1,10,12, 14,23,25	
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The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 3 August 1998	Examiner Wanzeele, R
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document</p>			